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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/417,705 | 10/13/1999 | JUNYA KAKU | 991142 | 7820 |
| 23850 | 7590 | 04/21/2005 | EXAMINER | |
| ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP | | | NGUYEN, LUONG TRUNG | |
| 1725 K STREET, NW | | | ART UNIT | |
| SUITE 1000 | | | PAPER NUMBER | |
| WASHINGTON, DC 20006 | | | 2612 | |

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/417,705

Applicant(s)

KAKU, JUNYA

Examiner

LUONG T NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10 and 13-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10 and 13-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/03/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 10, 13-14 and newly added claim 15, filed on 11/03/2004 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 10, 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishikawa (US 6,661,452) in view of Hirabyashi et al. (US 6,295,596) further in view of Kanai et al. (US 5,835,164).

Regarding claims 10, 13, Nishikawa discloses a digital camera, comprising:

an imaging device for outputting at a rate of one screen per a first period a first image signal of a first resolution which corresponds to an optical image of an object scene (CCD 12 outputs a first signal of a first resolution 1280x960 pixels, Figure 1, Column 3, Lines 3-13);

a creator (combination of signal processing 24 and thinning-out circuit 26, Figure 1, Column 4, Lines 57-67) for creating a second image signal of a second resolution (YUV data

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outputted from thinning-out circuit 26 has resolution 640x240 pixels, Figure 1, Column 4, Lines 57-67) lower than the first resolution by subjecting the first image signal outputted from said imaging device to a signal processing including a thinning-out process;

a memory (SDRAM 58, Figure 1, Column 4, Lines 30-40) having a single input/output port and a plurality of memory areas;

a writer for writing the second image signal created by said creator to one of said plurality of memory areas (SDRAM control circuit 30, Figure 1, Column 4, Lines 30-56);

a displayer for displaying an image based on the second image signal read out by said reader (LCD 40, Figure 1, Column 5, Lines 25-27),

wherein said memory is an SDRAM (SDRAM 58, Figure 1, Column 4, Lines 30-40), and said writer includes a buffer (buffer 32, Figure 1, Column 3, Lines 52-67) for holding the second image signal created by said creator and a transferor (bus 60, Figure 1, Column 4, Lines 30-41) for transferring the second image signal held by said buffer to said memory.

Nishikawa fails to specifically disclose a changer for changing a selecting a memory area at an interval of the first period; a writer for writing the second image signal created by said creator to one of said plurality of memory areas based on a changing result of said changer; and a reader for reading the image signal from another of said plurality of memory areas based on the changing result of said changer. However, Hirabayashi et al. disclose memory 11 (SDRAM) has two banks A and B, the data can be written and read out, independently of each other, these banks can be switched (figure 1, column 4, line 63 – column 5, line 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the

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device in Hayashi by the teaching of Hirabayashi et al. in order to obtain a device in which data can be read out fast by switching the banks (column 6, lines 29-30).

Nishikawa and Hirabayashi et al. fail to specifically disclose a reader for reading the image signal from another of said plurality of memory areas based on the changing result of said changer at a rate of one screen per a second period which is one over an integer of the first period. However, Kanai et al. teach a video signal processor, which comprises a memory, in which the digital data being written into the memory at a first rate based on a writing control clock and being read from the memory at a second rate, which is n times the first rate, n is an integer greater than one (see abstract, column 57, lines 29-38). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Hayashi and Hirabayashi et al. by the teaching of Kanai et al. in order to reduce flicker (see abstract).

Regarding claim 14, Hirabayashi et al. disclose the changer changes the selecting of the memory area in a predetermined order (column 6, line 64 – column 7, line 40).

As for claim 15, all the limitation are contained in claim 10, therefore, see examiner's comments regarding claim 10.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **LUONG T NGUYEN** whose telephone number is (571) 272 - 7315. The examiner can normally be reached on 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (571) 272 - 7308. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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04/17/05


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